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## FACSIMILE COVER SHEET

To: Thanh X. Luu  
Art Unit 2878

From: John Smith-Hill

Firm: US PATENT AND  
TRADEMARK OFFICE

Date: September 26, 2003

Fax: 1-703-872-9319

Our ref: ZIP 2216

Your ref: 09/811,059

Pages: Cover + 12

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REPLY UNDER 37 CFR 1.116  
EXPEDITED PROCEDURE  
EXAMINING GROUP 2878

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Markus PROBST

Art Unit: 2878

Application No: 09/811,059

Examiner:  
Thanh X. Luu

Filed: March 15, 2001

For: APPARATUS FOR MEASURING SCATTERED  
RADIATION EMPLOYING AN EMITTING  
DEVICE OR A RECEIVING DEVICE THAT  
INCLUDES A DEFLECTION ELEMENT

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REPLY TO THE OFFICE ACTION MAILED 07/07/2003  
AMENDMENT AFTER FINAL REJECTION

Mail Stop AF  
COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

OFFICIAL

Sir:

Further examination and consideration of this application  
are requested in view of the following Amendments and Remarks.

DESCRIPTION AMENDMENTS

Rewrite the paragraph beginning on page 1, line 5, to read as follows:

For such measurements of scattered radiation, which as a rule are performed in the range of visible light or in the near-infrared range, ~~a sender as a rule a light source a detector,~~ sender (as a rule a light source), a detector, and a separator are provided. The separator shields the sender and the detector from the liquid. The separator allows the radiation to pass through it and is generally comprised of a pane of glass, a pane of sapphire, or a transparent plastic pane. An arrangement of this type is shown in Figure 1. The light coming from the light source 1 is aligned in parallel paths by an optical lens 3, and after passing through the glass pane 4, it travels into the liquid to be measured. The scatter radiation occurring in the liquid as a result of parameters that indicate ~~impurity turbidity, for example is~~ impurity (turbidity, for example) is measured in the detector 2, and the path of detected scattered radiation is also represented. Since the radiation is deflected relative to the perpendicular 6 when it enters the glass pane 4, and since, as a result of the lower difference in refractive power between the pane and the medium compared to the difference between the air and the pane, this process occurring at the boundary between the pane and the test medium is not canceled out, and since the radiation is refracted away from the perpendicular when it leaves the glass pane 4 traveling in the direction of the detector 2, the result is an apparatus whose length 7 is relatively large. This in turn means that the detected radiation must be oriented at an angle of approximately 90 degrees relative to the beam of light that is projected into the liquid 5.